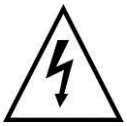
— DVR —

This document contains preliminary information and subject to change without notice.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of unprotected “Dangerous voltage" within the product's enclosure that may be strong enough to cause a risk of electric shock.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

NOTE: This equipment has been tested and found to comply with the limits for a class digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

Notice: Ghosting or fractured images may occur on the screen when there is a suddenly surge or lightning stroke which cause damage on IC in the DVRs.

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CHAPTER 1 LIVE, PLAYBACK AND PTZ OPERATIONS

1-1 LIVE Mode

You can monitor all the channels, listen to audio signal and have some related operations under *LIVE* mode. This paragraph describes the IR remote control, mouse operation and on screen graphical icons under LIVE mode.

Table 3-1.1 Functions of remote control under LIVE mode

Button	Description
REC	Start/Stop recording.
PLAY	Start playing back the most recently recorded segment.
LOCK	Enable/ Disable lock.
1,2,3,4	Select full screen channel.
FREEZE	Enable/ Disable screen freeze.
	Switch to 4-split display.
	Switch to 9-split display.
ENTER/MODE	Switch to full screen or multi split display.
MENU/ II	Enable/ Disable setup menu.
BK-UP／ESC	Enable/ Disable backup menu.
SRH	Enable/ Disable search menu.
MUTE	Switch channel 1 audio output enable/disable.
STATUS	Enable/ Disable status menu.
OSD	Enable/ Disable OSD display
ZOOM/ZOOM－	Enable/ Disable 2x zoom. Using the arrow keys or mouse to move the enlarged area.
PIP/ ZOOM＋	Enable/ Disable PIP display Use the mouse to click the channel name to switch to other channels.
PTZ	Enter the PTZ mode.
AUTO	Start the automatic switch.
DVR1,2,3,4	Switch ID1~4 for DVR ＊

＊: DVR factory default ID is ID1. In case the remote controlcould not be operated normally, press the"DVR1"button re-mapping ID.

Table 1-1.2 Graphical icons that will display after right-clicking your mouse under LIVE mode.

Icon	Description
	Resting the cursor on this icon will bring up the following four menu icons.
	Main menu.
	Search menu.

	Backup menu.
	PTZ mode.
	Turn on/off recording.
	Playback.
	Resting the cursor on this icon will bring up the following five display icons.
	FREEZE.
	PIP，picture in picture display.
	ZOOM, double the screen size
	AUTO-sequence
	LOCK, activate the key lock.
	Full screen display.
	Quad display.
	5 display
	9 display
	9 display
	9 display

Table 1-1.3 Description of on screen graphical icons in LIVE mode

Icon	Description
	Recording is on
	Schedule Recording is on
	Live Audio is on
	Live Audio is off
	Motion detected on the channel
	The channel sensor alarm has been triggered (depends on model).

	Video loss detected on the channel
	USB device is detected
	Burner is detected.
	Connected to the LAN cable.
	AUTO-seq is on
	Freeze is on, screen is frozen
	LOCK is on
	PTZ control is on
	Shows the current hard disk space has been used (99% mean used 99%, remain 1%)
	Lower right of each CH will show the current time

Icon	Description
	Image quality (High/Low)
	Full screen
	Record
	Snapshot
	Record and snap shot file saving path setup
	Enable / Disable Shortcut Toolbar

1-2 PLAYBACK Mode

Switch to PLAYBACK mode by pressing “PLAY” under the LIVE mode, the graphical icon will show up on the upper center of the screen and the operation panel (see below picture) will show up at right lower corner of the screen. You can drag the panel by mouse to place it on any location of your screen.

Table 1-2.1 Remote control functions under the PLAYBACK mode

Button	Description
ENTER / MODE	Switch to full screen or multi split display.
MENU / ▮▮	Turn on/off PAUSE.
PLAY	Play back at normal speed.
▲ / SLOW	Play back at slower speed. The speed will be slowed to 1/2, 1/4, 1/8, by each pressing of the button till the slowest limitation of the normal speed.
◀◀ / ◄	Fast rewind. Each press increases the speed to the next level. There are six speeds: 2x, 4X, 8X, 16x, 32X and 64X.
▶▶ / ►	Fast forward. Each press increases the speed to the next level. There are six speeds: 2x, 4X, 8X, 16x, 32X and 64X.
▼ / ■	Stop playback.

Table 1-2.2 The mouse operation under the PLAYBACK mode.

Icon	Description

	「◀◀ / ◀」 Fast rewind
	「▶▶ / ▶」Fast forward
	Play/pause
	「▲ **/ SLOW**」，slow playback
	「▼ / ■」stop playback
	Playback channel by channel with snap shot display
	Full screen display
	Quad display
	9 screen display
	9 screen display
	9 screen display
	5 channel display
	Zoom-in display

If you want to monitor single channel, please choose a channel and click left butt on of mouse two times.

1-3 PTZ Mode

Switch to the PTZ mode by pressing “PTZ” button under the LIVE mode. The PTZ icon will appear on upper left side of screen and the control panel will appear on the down right side of screen.

Table 1-3.2 Mouse operation under the PTZ mode

Icon	Description
	Leave PTZ Mode，back to the LIVE mode
	Pre-set number N. (0~255)
	Go to pre-set number N.
	Set current PTZ location at pre-set number N.
	「TOUR」, press to activate pre-set tour*
	「PIP」, Set current PTZ location as the start of line-scan. *
	「FREEZE」, Activate line-scan. *
	「ZOOM」, Set current PTZ location as the end of line-scan. *
	To move PTZ in 360°
	PTZ zoom in; PTZ zoom out
	PTZ focus in; PTZ focus out.
	PTZ IRIS open, PTZ IRIS close.
Below functions need support from specific PTZ manufacturer. Please check user manual of your PTZ for more detail.	
	AUX 1~8,「AUTO」Key ＋ Number key「1~8」
	「Backup」, Customized function。

*** PTZ communication protocols from different brands aren't compatible 100% sometimes. Therefore, some of these functions may be unavailable.**

CHAPTER 2 MAIN MENU SETUP

To enter the main menu and set up DVR, log-in account and user password are required.
The default password of the administrator is “**123456**”. Please check the “Account Setup” for related setup of other log-in users.

Table 4-0.1 Some definition of virtual keyboard.

Item	Description
⇧	Switch between capital and small letters.
.?123 / ABC	Switch between numbers and letters.
Esc	Press to cancel the setup, and re-choose the login account.
⌫	Delete the last character.
⏎	Enter to identify the password. It will enter the set up menu, If the password is verified.
	Space key

Table 2-0.2 The operation of remote control under the setting menu

Item	Description
◄ ►	Switch to different options under one item
▲ ▼	Switch to different items
MENU	Save setup and back to LIVE mode
ESC	Back to Upper level of menu without saving
ENTER	Enter the menu, or display virtual keyboard

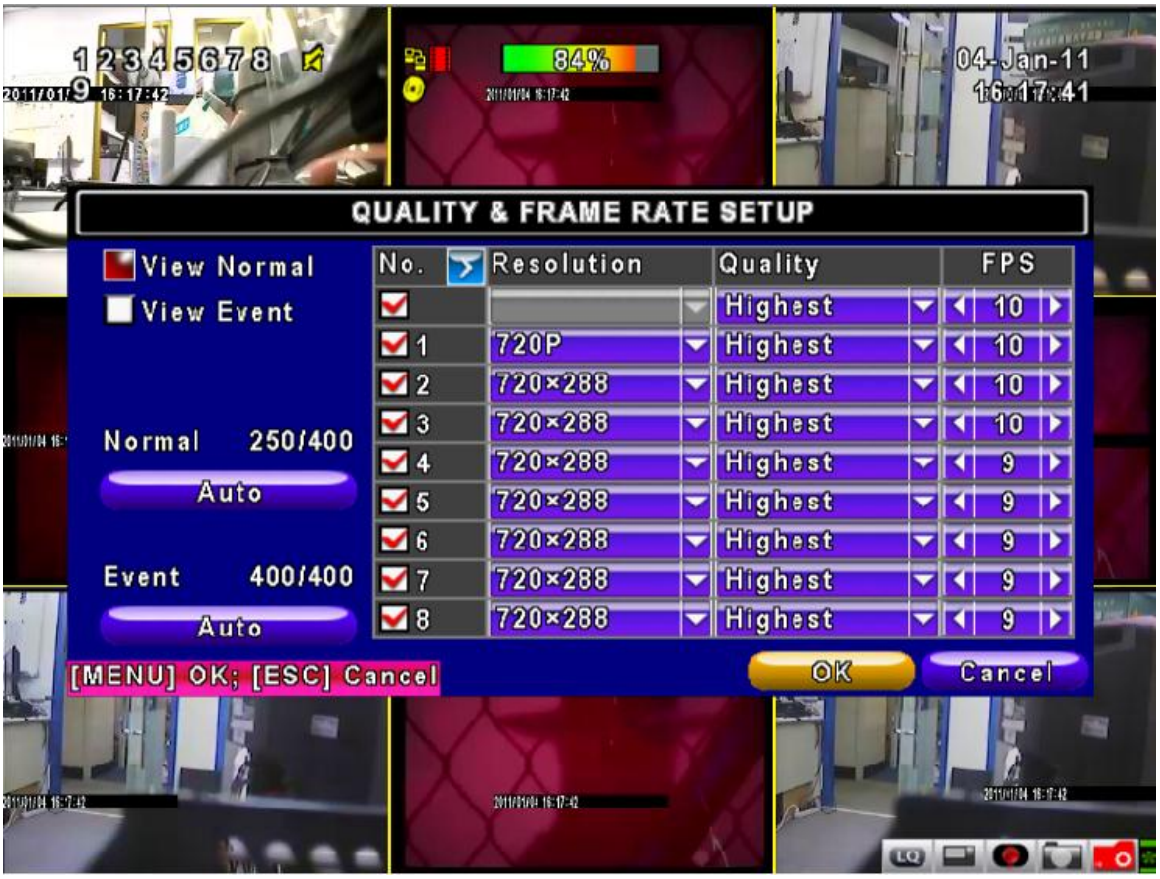
*PS. The initialization of new-installed HD is required before recording, please refer to "**UTILITY SETUP**" for detail.*

2-1 RECORD SETUP

Item	Description
HDD FULL	Select STOP to stop recording or OVERWRITE to reuse the HDD when HDD is full 「**Stop**」: Stop Recording 「**Overwrite**」: Start to overwrite that begin from the oldest data of HDD, and continue to record.
OSD position X	Setup OSD X axis
OSD position Y	Set up OSD y axis
OSD position setup	Set up OSD axis

Video Preservation	Setup the video preservation period. Recorded video will be deleted automatically after expiry of preservation period.
Quality & Frame Rate Setup	Setup the quality and frame rate for each channel under normal recording and event recording type.

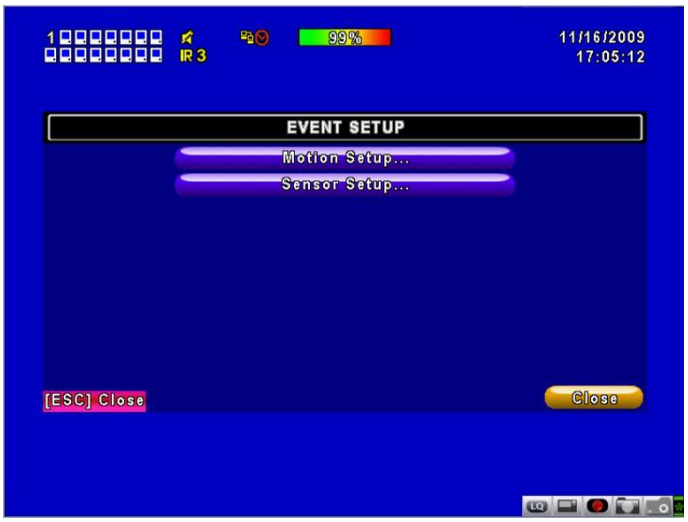
2-1.1 Quality & Frame Rate Setup



Item	Description
Normal setup/ event setup	Select recording mode
No.	Check/uncheck the box enable/disable selected channel recording
Resolution	Select recording resolution: NTSC:360x240, 720x240, 720x480 PAL:360X288,720X288,720X576
Quality	Select quality: Below Basic/ Basic/ Normal/ High/ Highest
FPS	Select recording frame rate.
Auto	Assign each channel with its maximum accessible fps

Note: Channel 1 is for HD, so it is one more option 720P in Resolution

2-2 EVENT SETUP



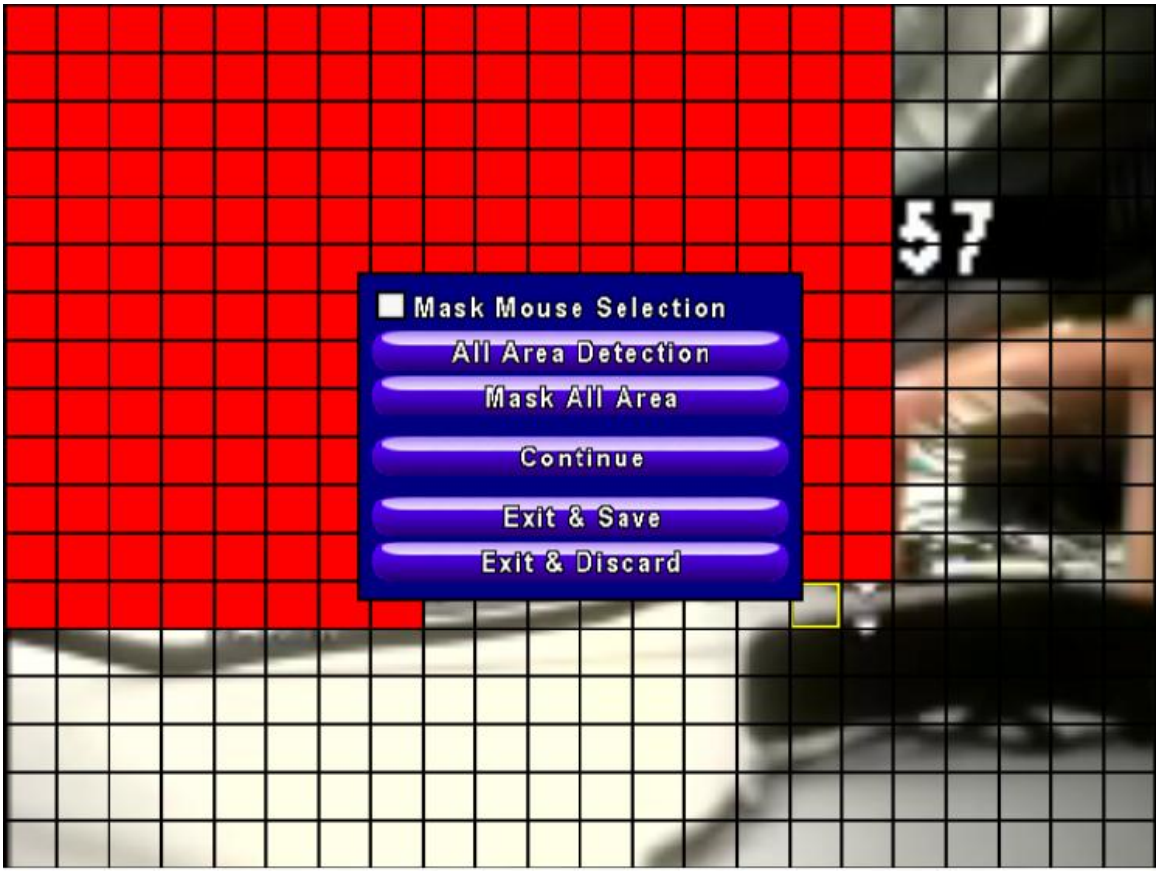
Item	Description
Motion Setup	Enter to set up motion detection
Motion Setup	Enter to set up sensor detection

2-2.1 MOTION SETUP

Item	Description
Alarm Duration(Seconds)	When is motion detect, the number of seconds continuous alarm
Motion Popup	Check the box to Enable/Disable popup screen function for all channels. When Sensor is detected in LIVE mode, the detected channel image will pop up in full screen display.
1~9	You can setup independently for each channel.
Enable	Check the box to Enable/Disable motion detection for each channel.
Sensitivity	Drag the white bar or press ◄ ► to set up Sensitivity from value 1 to 10 for each channel. The higher value you set the higher sensitivity it will be.
Motion Area Setup	Enter to setup motion detection area
Apply to All	The setting can be applied to all channels.

2-2.1.1 MOTION AREA SETUP

The motion detection has been divided into 20x15 grids. The default detection area is full screen as it marked in transparent for local DVR and purple for remote access. Areas deselected for motion detection are marked in red for both local and remote site.



Item	Description
Mask Mouse Selection	Switch between “select” and “deselect” for cursor-dragging function
All Area Detection	Select entire screen as detection area.
Mask All Area	Deselect entire detection area.
Continue	Continue setup
Exit & Save	Save setup and leave
Exit & Discard	Cancel setup and leave

2-2.2 SENSOR SETUP

Item	Description
Alarm Duration(Seconds)	When motion is detect, the number of seconds continuous alarm
Sensor Popup	Check the box to Enable/Disable popup screen function for all channels. When Sensor is detected in LIVE mode, the detected channel image will pop up in full screen display.
All Off	Set all sensor off
All Low	Set all sensor polarity low
All High	Set all sensor polarity high
Sensor Polarity	Click or press ▼ to select between HIGH, LOW voltage for triggering sensor detection or OFF to turn off polarity for each channel **Low** Polarity：Sensor has not been triggered. When connected, sensor will be turned on.. **High** Polarity：Sensor has been triggered. When connected, sensor status will be turned off.. **Off** ：Sensor is deactivated, and will not be turned on/off.

2-3 SCHEDULE SETUP

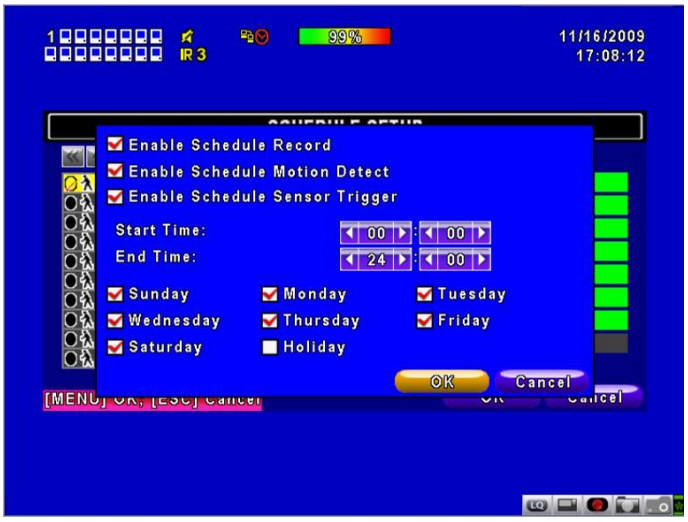
Except from starting recording manually, you can also setup the recording time by weeks

and schedule including normal, motion detect, and recording type.

Item	Description
Page	Each page provides 10 schedules for setup. 5 pages in total.
Holiday Setup	Enter to setup holiday, up to 50 days, other than weekends,.
View Event/ Motion/ Sensor Setup	View Normal/ Motion/Sensor

2-3.1 Schedule Record Setup

Click on the time on the left side. The setup menu will be displayed. You can have detail setup by dates, Time and event.



2-3.2 Holiday Setup

Since holidays are different by different country and region, you can setup the holiday of your location accordingly.

2-4 CAMERA SETUP

Item	Description
1~9	You can setup independently for each channel.
Mask	Check the box to Enable/Disable mask function for LIVE mode
Sharpness	Drag the bar or press ◄ ► to adjust Sharpness of your camera from value 0 to 15.
Brightness	Drag the bar or press ◄ ► to adjust Brightness of your camera from value 0 to 255.
Contrast	Drag the bar or press ◄ ► to adjust Contrast of your camera from value 0 to 255.

Saturation	Drag the bar or press ◄ ► to adjust Saturation of your camera from value 0 to 255. The default value is 128.
Hue	Drag the bar or press ◄ ► to adjust Hue of your camera from value 0 to 255. (**This function doesn't support at PAL system**)
Name	Set up name of each channel
Volume	Audio volume under LIVE mode and recording mode can be adjusted.

2-5 ACCOUNT SETUP

The Account Setup menu is used to provide role-based permission independently setting for each user (maximum of 4 users) to access DVR over network. The default admin account and password is **"admin"** and "**123456**"

(The default password remains the same after firmware upgrade)

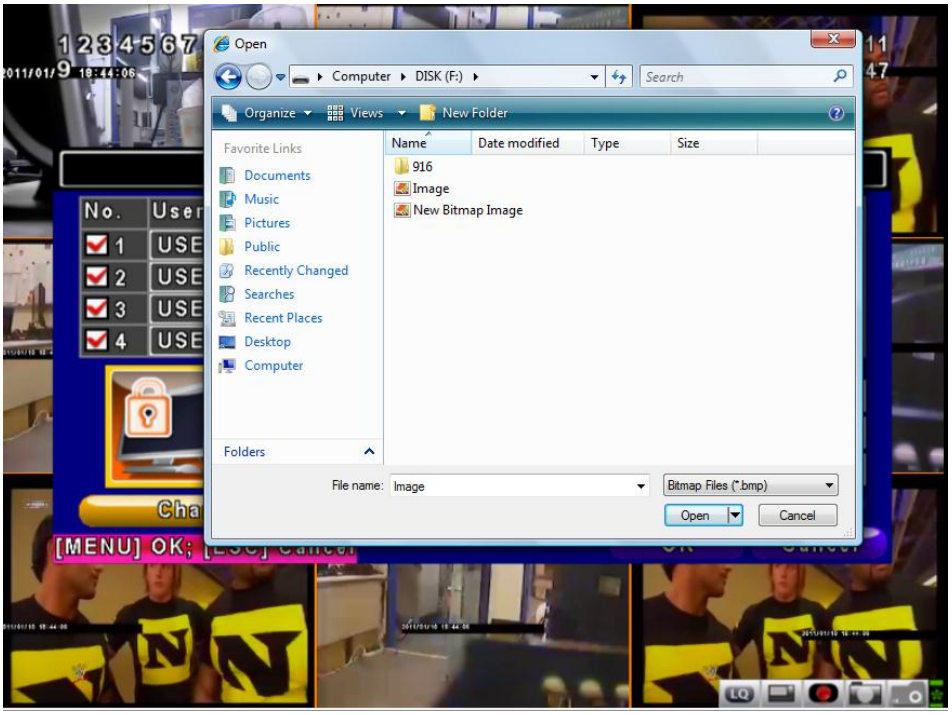
Item	Description
No.	Check to activate the user's account.
Username	Set up username
Password	Set up password for each user. Password is 8-digits required and can be mixed by letters and numbers with case-sensitive. Letters can be mixed with capitals or lowercases.
Permissions	Set up Permissions for each user
Change Admin Password	Change administrator's password
Picture	Change user's picture

2-5.1 Permission Setup

The Account Setup is set to provide individual user (maximum of 4 users) role-based permissions, including access to Setup menu, Network operation, PTZ function, Playback, Utility, Backup, Password expiry date and Mask on specific channels while playing back.

2-5.2 User Picture Setup

User can select picture wished to be changed to from hard drive.



2-6 NETWORKING SETUP

Item	Description
Connect type	Setup mode for network connection: **(ADSL、DHCP、LAN、3G).**
HTTP Setup	Enter to set up HTTP
DDNS Setup	Enter to set up DDNS
Mail Setup	Enter to set up mail

2-6.1 NETWORKING SETUP

There are three ways to connect to the network as followed.

2-6.1.1 ADSL

Select ADSL for network connection, the following information is required.

Item	Description
User Name	Enter user name provided by ISP
Password	Enter password provided by ISP

2-6.1.2 DHCP

When DHCP is selected, IP address will be assigned by DHCP server automatically.

2-6.1.3 LAN

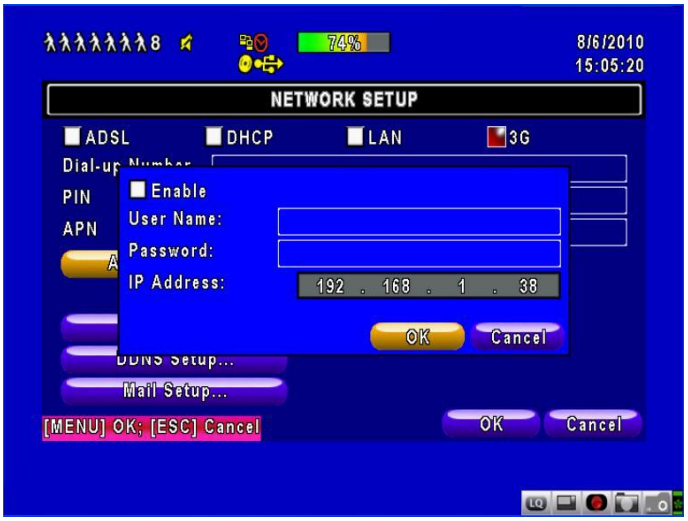
Select LAN for network connection, the following information is required.

Item	Description
IP Address	Enter IP address provided by ISP
Subnet Mask	Enter IP address of Subnet Mask provided by ISP
Gateway	Enter IP address of Gate way provided by ISP
DNS	Enter DNS address provided by ISP. **(Note: The correct DNS address must be entered for DDNS function).**

2-6.1.4 3G

Select 3G for network connection, the following information is required.

Item	Description
Dial-up Number	Dial-up Number，Determined as the ISP
PIN	Enter SIM card password
APN	Enter ”internet”
Advance Setting	The advanced settings (Taiwan ISP outside)



Item	Description
Enable	Enable advance setting
User Name	Enter ISP username
Password	Enter ISP password
IP Address	Enter the ISP provides a fixed IP address。 (if the client uses the Internet only need to enter a fixed IP)

PS：This feature currently only supports the Huawei 3G card

2-6.2 HTTP Setup

Item	Description
Enable HTTP Server	Check to enable HTTP server. Users can remotely access into the DVR over the network if the HTTP function is activated.
Port	Enter a valid port value from 1 up to 65000. The default value is 80.
Auto	Assign each channel with its maxima accessible fps
No.	Chanel number
Quality	Set up record quality. There are below basic, basic, normal, high, highest
FPS	Set up record FPS

2-6.3 DDNS Setup

Item	Description
Enable DDNS	Enable/disable DDNS function.
DDNS Server	Enter the registered SMTP Server: **ez-dns＊、I-DVR.NET＊ 、DYNDNS.ORG、NO-IP.ORG、3322.ORG**
Host Name	Enter the completed registered SMTP Server.

	(Including username + Server) If the user name is h.264 and you choose i-dvr as your server, you should enter: h.264.i-dvr.net
User Name	Enter user name.
Password	Enter password.

＊For more detailed I-DVR.NET operation instruction, please refer to appendix Ⅰ、Ⅱ

2-6.4 Mail Setup

When event occurs (VLOSS, MOTION), email will be sent to the receiver account automatically.

Item	Description
Enable E-mail Notification	Check the box to enable/disable E-mal Notification function.
Port	Port for SMTP server.
SMTP Server	Enter to set up SMTP Server name. (Varies according to the user)

User Name	Enter to set up User Name.
Password	Enter to set up Password.
Sender E-mail	Enter to set up e-mail address of receivers.
Trigger Event	Enter to select events to send out E-mail notifications when below circumstances happen: Motion, Sensor and Vloss (Video Loss).
Receiver E-mail	Enter to set up e-mail addresses for up to 10 receivers individually.

2-7 PTZ & RS485 SETUP

The DVR allows users to control PTZ functions of your camera. To enable PTZ function, the 485 cable should be connected to the RS-485 port of DVR.

Item	Description
Enable PTZ	Click the box to Enable/Disable PTZ function for each channel.
Protocol	Set up the protocol of PTZ cam. The supported protocol are **PELCO-P, PELCO-D, KND, LI-LIN, SAMSUNG, LG, AVTECH.**
PTZ ID	Click or press ◄ ► to set up PTZ ID. The valid ID value is from 1 to 64.
Baud Rate	Select Baud Rate for PTZ from 2400, 4800, 9600,19200
RS-485 ID	Select RS-485 ID from 1 to 64
RS-485 Baud Rate	Select RS-485 Baud Rate from 2400. 4800, 9600,19200
Keyboard	Select Keyboard.

2-8 SYSTEM SETUP

Item	Description		
DVR Name	The name of DVR will be shown when users login from remote access.		
Language	Click or press ▼ to select OSD language.		
Remote ID	Default ID is 0. DVR is controlled by standard remote control,		
Auto Lock	After one minute without any action, the DVR will switch to *LIVE* mode automatically. Auto lock can function differently according to the setting below.		
	Function / Setting	Auto Logout (Note1)	Key Lock (Note2)
	Key lock	○	○
	Key unlock(Note 3)	○	×
	Disable	×	×
Auto Reboot	Enter to set up auto reboot time		
Display Setup	Enter to set up Display		
Date/Time Setup	Enter to set up Date/Time		
Device Setup	Enter to set up Buzzer & Relay		
Spot Setup	Enter to set up Spot		

There are three options: Disable, key unlock, key lock

「◯」: Enable the function, 「x」: Disable the function

Note 1: When logged out automatically, you will have to operate in limited authority such as operations like: Freeze the screen, Picture in picture, Zoom in/ out, switch between channels…etc. If you need to enter the Setup menu, Search menu, backup menu, Record…etc, user's account and password are required.

Note 2: When the key lock automatically, remote control and mouse can't function before entering verified password.

Note 3: When in "key unlock" mode, the system will log out automatically if there's no DVR operation in one minute.

2-8.1 DISPLAY SETUP

Item	Description
Auto-Seq Interval	Set up duration time in seconds for the interval between channels under Auto-Seq mode.
Show OSD	Turn On / Off OSD display
Show DVR Status	Turn On / Off DVR illustration and record status display
Show Date/Time	Turn On / Off date and time display
Show Channel Name	Turn On / Off channel name display
Border Color	Set up the color of border in LIVE , PLAYBACK mode.（Red, Green, Blue）

2-8.2 DATE/TIME SETUP

Item	Description
Hour Format	12HOURS/ 24HOURS
Date Format	MM-DD-YY/DD-MM-YY/YY-MM-DD
Date/Time Position	Choose the position of Time and Date display
Change Date & Time	Setup time and date of DVR
Time Zone Setup	Set up GMT and Daylight Saving Time.
Internet Time Setup	Setup automatic synchronization with internet server

2-8.2.1 CHANGE DATE & TIME

Setup date and time of DVR manually according to user's local time.

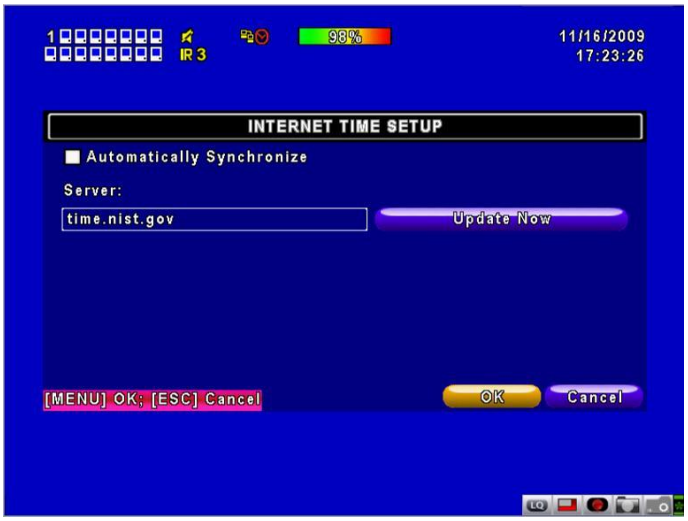
2-8.2.2 TIME ZONE AND DAYLIGHT SAVING TIME SETUP

Set up time zone and activate Daylight Saving Time function according to user's DVR location.

Item	Description
Select Time Zone	Enter to modify GMT from GMT- 13 to GMT+ 13
Daylight Saving Time	Turn on/ off Daylight Saving Time

2-8.2.3 INTERNET TIME SETUP

Synchronize your DVR time with internet time server.



Item	Description
Automatic Synchronization	Check to enable DVR automatic synchronization function. Effective by this option selected, DVR will automatically synchronize the time upon rebooting or by every 24 hours after booting.
Update Now	Effectively, Date and Time show on DVR will immediately correspond with those in internet server.

2-8.3 BUZZER & RELAY SETUP

Item	Description
Mouse Speed	Move the mouse cursor speed, the more the faster to the right. (Only Local machine)
Buzzer & Relay Setup	Into the buzzer & relay setup.

Item	Description
Key Tone	Enable/Disable keystrokes.
Buzzer	Enable/Disable buzzer operation when the alarm is triggered for sensor, motion and vloss (Video Loss).
Relay	Enable/Disable the signal to be sent to the RELAY OUT blocks when the alarm is triggered for sensor, motion and vloss.

2-8.4 SPOT SETUP

DVR's Main Monitor output signal, do the main screen output or switch SPOT mode output

Item	Description
SPOT MODE	Channels display in spot for two different modes: Disable:The screen is same the main screen with VGA output, Enable: Spot Mode
Interval (Seconds)	The duration time in seconds for the interval between channels under SPOT mode.
Skip Video Loss Channel	Whether to skip channels without video signal.

4-9 UTILITY SETUP

Item	Description
HDD Initialization	Select to enter hard disk initialization menu. **Please stop recording before entering this menu.** Enter the menu, system will show all the data (model ,volume) of HDD that installed in DVR. Check the HDD you'd like to initialize then press "Start". HDD initialization is successful when the status shows "Succeed"
USB Initialization	Clean up all data on USB. Enter USB initialization and press YES to clean up all data on your USB. The initialization is done when it's showed "Succeed".
System Recovery	Restore system default values
Reset System Events	Reset all the recording events in DVR.
Copy Setup to USB	Copy configuration to a USB device. There will be a file named 「sdvr_conf.dat」 on your USB.
Download Setup from USB	Download configuration from a USB device into DVR.
Upgrade	Upgrade DVR through USB. Please stop recording and backup setup configuration before upgrading. **System will reboot automatically when the upgrade is completed.**

Notice! DO NOT TURN OFF POWER OR UNPLUG USB DEVICE DURING THE UPGRADE as it may cause incomplete firmware upgrade and damage to the DVR.

4-10 DIAGNOSTIC

Item		Description
Version		The current firmware version of DVR
IP		The connected IP address of DVR. If disconnected from network, the screen will display" NETWORK DISCONNECT".
MAC		MAC Address of DVR
HDD Status	**No.**	HDD number
	Volume	HDD Capacity
	Used Rate	Percentage of space used on HDD.
	Status	Shows HDD status. **USING** means the HDD is being used for recording now **GOOD/BAD** means the HDD has a known/unknown format for the DVR. (Note: Please initialize your newly-installed HDD before using it.)
	Format Time	The latest format time of HDD

CHAPTER 3 BACKUP & SEARCH

3-1 BACKUP SETUP

User can backup any segment of recorded data in a specified time frame. To do so, either a CD R/W or storage device, like USB, must be connected to the DVR. The format of backup file is *IRF* file that can be played by both “Ifileplay” and “CMS”

＊:Use the USB flash backup, the system will automatically copy "Ifileplay" to the USB

Item	Description
From	The start time of backup file
To	The end time of backup file
Device	Select USB or PC as the backup device
Free Space	The available space in your backup device. (not available for PC backup)
Refresh	Recalculate the available space of backup device. (not available for PC backup)
Required Space	Show the size of the backup file
Calculate	Calculate the size of backup file
Start	Start backup operation. **Be sure to calculate the size of backup file BEFORE operating backup.**

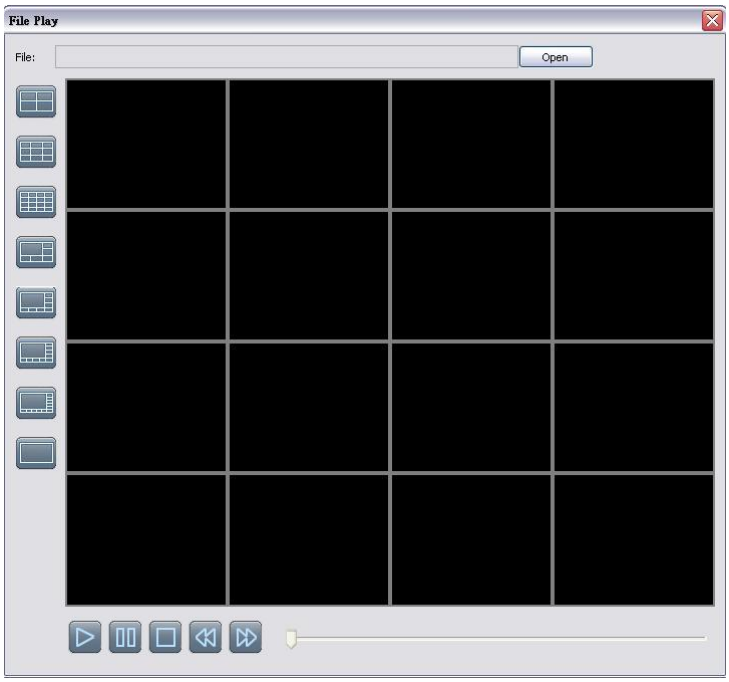
Note! Do not unplug the USB device or turn off the DVR during the backup process to avoid unrecoverable error.

iFileplay Use Method

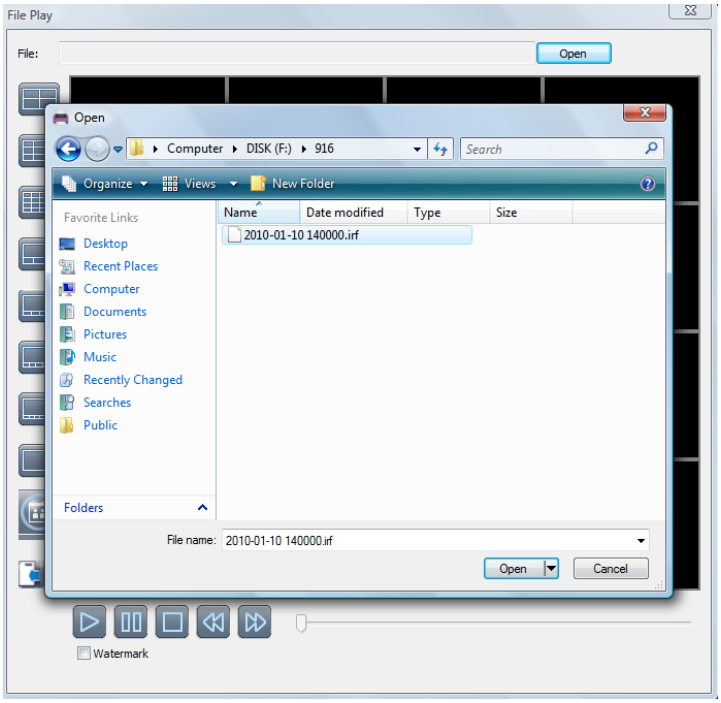
Step 1: install 「iFileplay」software to your PC. You can get「iFileplay」file from the CD with DVR Packing.

PS: When you using USB to backup file, iFileplay.exe will copy to USB with the backup file automatically.

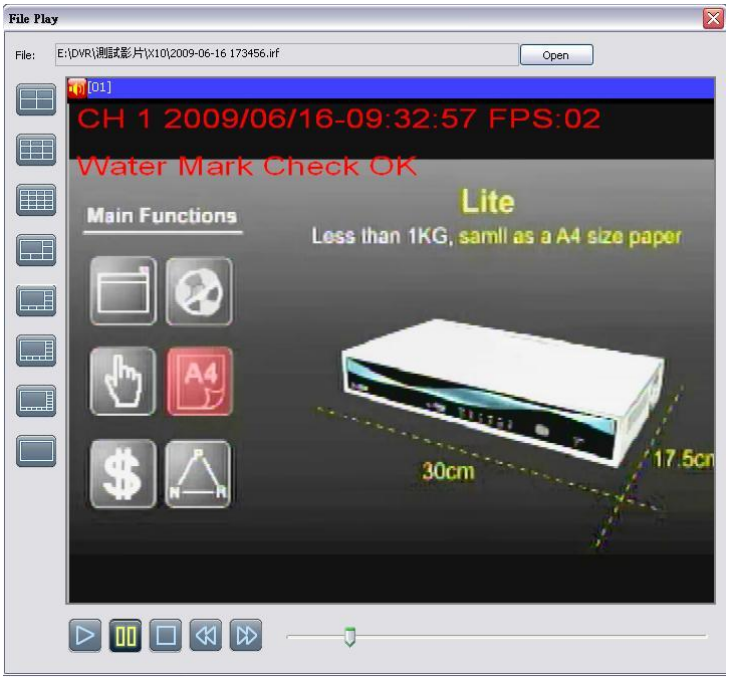
Step 2：Setup「ifileplaypack.exe」。



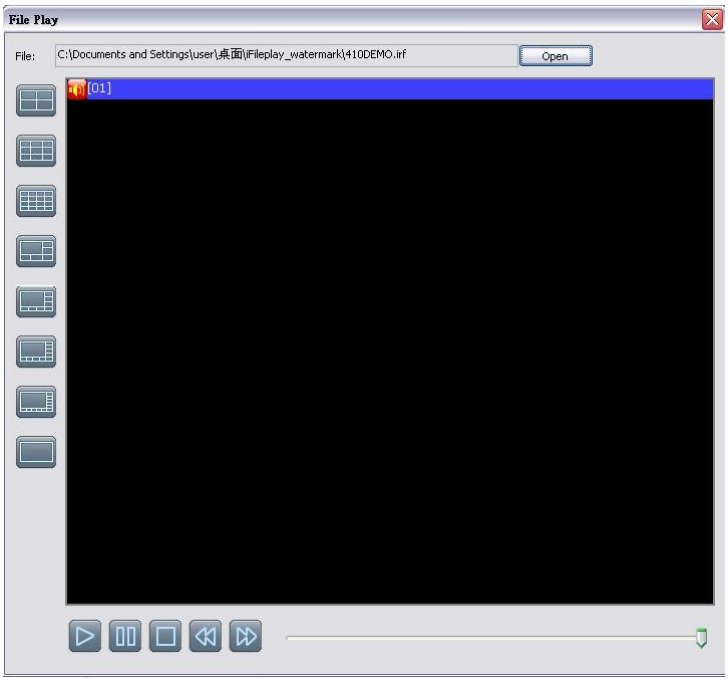
Step 3：Click「open」，choose and star a DVR backup file。



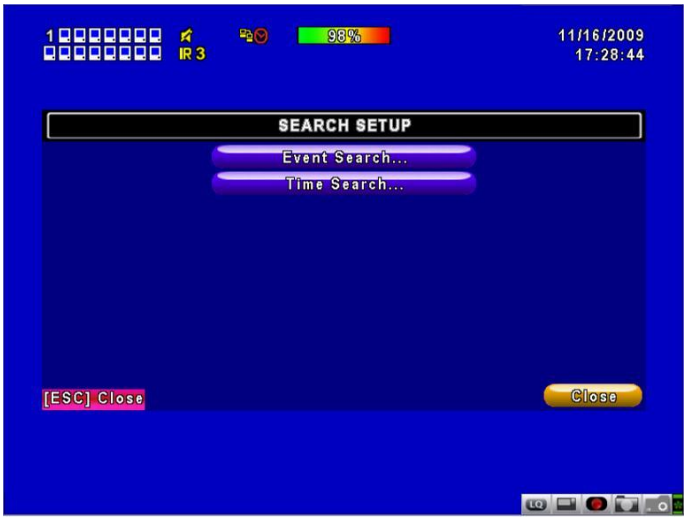
Step 4：Ifileplay software will play the backup file automatically.



Step 5：If there is no display on the screen, The backup file is not our DVR recording format. Please check it.



3-2 SEARCH SETUP



Item	Description
Event Search	Event search menu
Time Search	Enter time search menu

3-2.1 EVENT SEARCH

The DVR automatically records events with type, time and channel information included. If there is recording data for an event, a yellow signal will be shown on the left side of time information. Rest your cursor under the line and press “enter”, or left click your mouse to playback the recording data.

P.S. Event Records will still be generated even when hard disk is not installed or the record function is not activated. However, the record can’t be viewed after selecting it.

Item	Description	
Criteria	Setup conditions of event search	
Page	Switch between pages of events	
Date/Time	Date/time when event occurred.	
Event Type	Event type, defined as following	
	MOTION	Motion Detected
	Video Loss	Video Loss
	Remote Login	user log-in over the network
	Remote Logout	user log-out over the network
	Power On	DVR Power on
	HDD Full	HDD Space FULL
	HDD Error	Detect HDD error
	Reboot	DVR Reboot
Info	The channel where event occurs or login user	

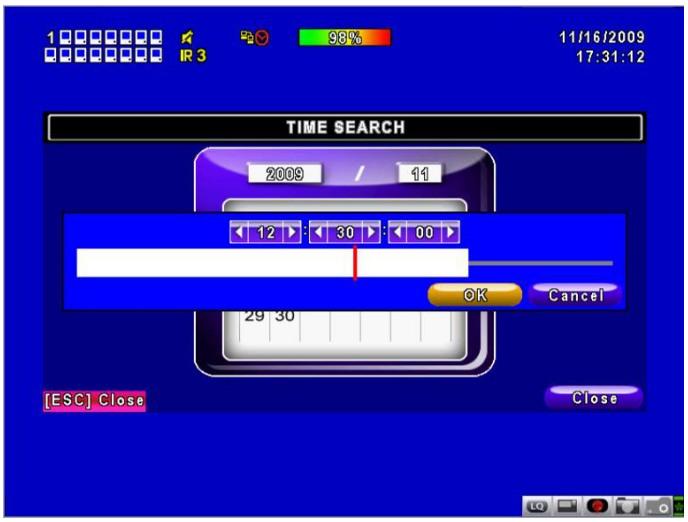
3-2.1.1 CRITERIA SETUP FOR EVENT SEARCH

The amount of events can be numerous. Therefore, you can facilitate event sorting by setting up “criteria”. Setup “start time” and “end time” for event search, then the search result will be limited to this specific period of time. Only checked events and channels will be sorted in event search.

3-2.2 TIME SEARCH

TIME SEARCH can search for the specific time of recording data to playback. Press “Enter” or left click on the desired date to playback. Note that dates with recording data are marked with a red square “ □ “System will start playing back according to the date you selected. Calendar will be shown by using mouse to click on “year” and “month”.

Click “date” to display recording time of that specific date with time bar. You can change time (hour/minute/second) or click on a specific time of time bar by mouse then press “**ok**”. DVR will playback the selected recording data.



CHAPTER 4 Remote Software Installation and Setup

4-1 AP Software Installation and instruction

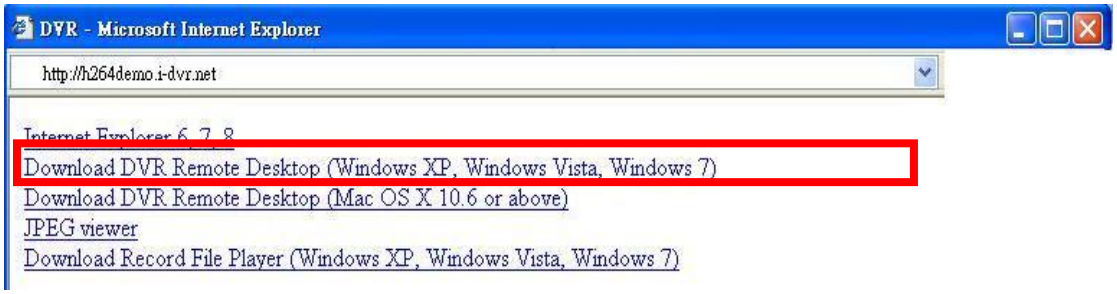
AP software:「DVR Remote Desktop」can allow you to remotely access and control the DVR from PC.

p.s. Operation system currently supports Windows XP SP2 and above and Windows Vista, Windows 7

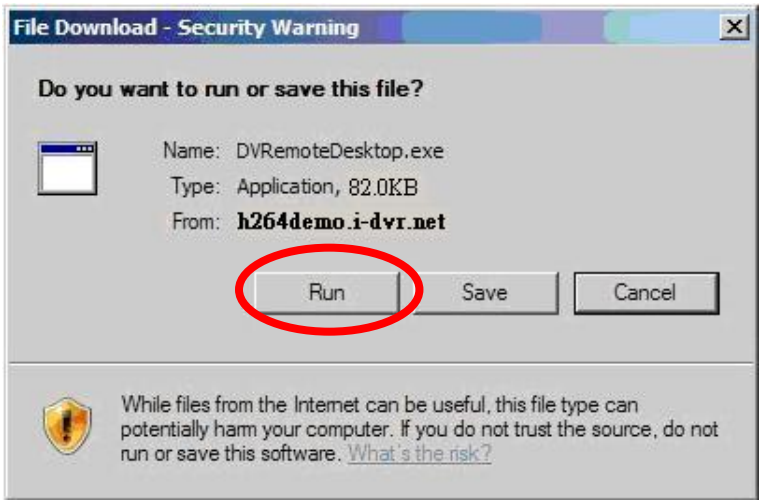
Step One：Enter the IP address of DVR in IE browser

Step Two: Windows as below will show up. Please enter the user name and password. Default user name and password is **admin/123456**. Other related setup about user account and password, please check **"Account Setup**. "

Step Three: Click on the link to start downloading the AP software.


DVR - Microsoft Internet Explorer
http://h264demo.i-dvr.net
Internet Explorer 6, 7, 8
Download DVR Remote Desktop (Windows XP, Windows Vista, Windows 7)
Download DVR Remote Desktop (Mac OS X 10.6 or above)
JPEG viewer
Download Record File Player (Windows XP, Windows Vista, Windows 7)

Step Four: Run or Save our AP software.

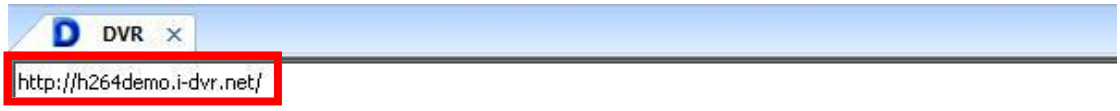

File Download - Security Warning
Do you want to run or save this file?
Name: DVRemoteDesktop.exe
Type: Application, 82.0KB
From: h264demo.i-dvr.net
Run
Save
Cancel
While files from the Internet can be useful, this file type can potentially harm your computer. If you do not trust the source, do not run or save this software. What's the risk?

Step Five: If you choose to run the software, Start window will be shown up. Please enter information of login DVR: IP, Port, Username and Password, or choose “Play Recorded File” to open backup files in your PC.

Step Six: You’ve logged into the DVR

4-2 How to do remote monitoring through IE

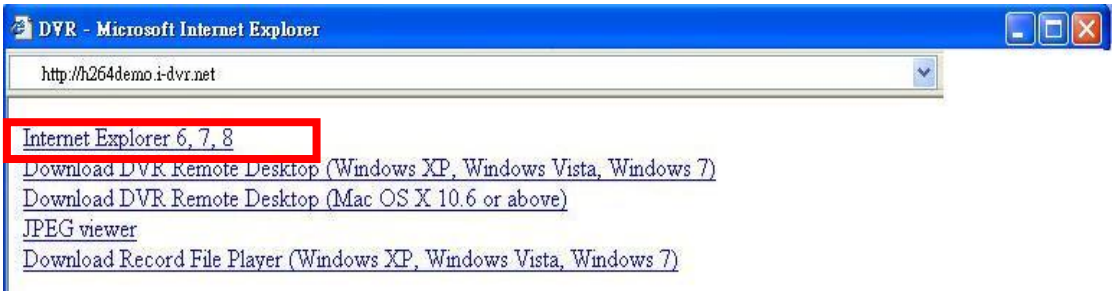
Step One：Enter the IP address of DVR in IE browser. The address appeared in this image is only for demonstration. Actual address is depending on the setup of on-site DVR.



Step Two: Windows as below will show up. Please enter the user name and password. Default user name and password is **admin/123456**. Other related setup about user account and password, please check **"Account Setup**. " The user name and password appeared in this image is only for demonstration. Actual user name and password depend on the setup of on-site DVR.

Step Three: Click on “Internet Explorer 6, 7, and 8”to start downloading the AP software. (The first option is for IE view, please refer to next chapter for more information)

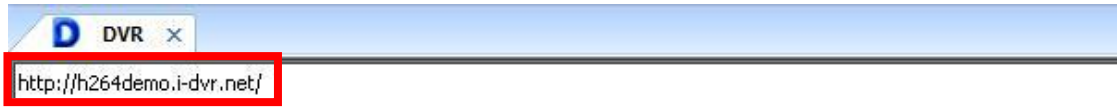
p.s. There will be IE connection security issue when clicking this link for the first time. Please refer to index II for Remote Monitoring IE ActiveX Control Installation Instruction.


DVR - Microsoft Internet Explorer
http://h264demo.i-dvr.net
Internet Explorer 6, 7, 8
Download DVR Remote Desktop (Windows XP, Windows Vista, Windows 7)
Download DVR Remote Desktop (Mac OS X 10.6 or above)
JPEG viewer
Download Record File Player (Windows XP, Windows Vista, Windows 7)

Step Four: DVR images appear.

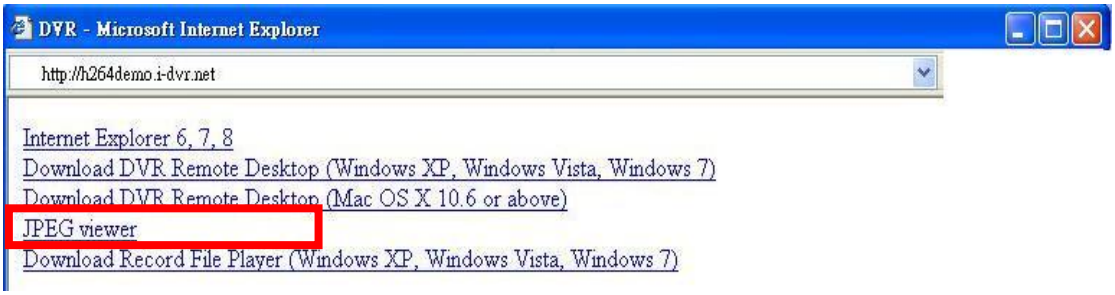
4-3 How to do remote monitoring through JPEG VIEWER (Only Monitor Function)

Step One：Enter the IP address of DVR in IE browser. The address appeared in this image is only for demonstration. Actual address is depending on the setup of on-site DVR.

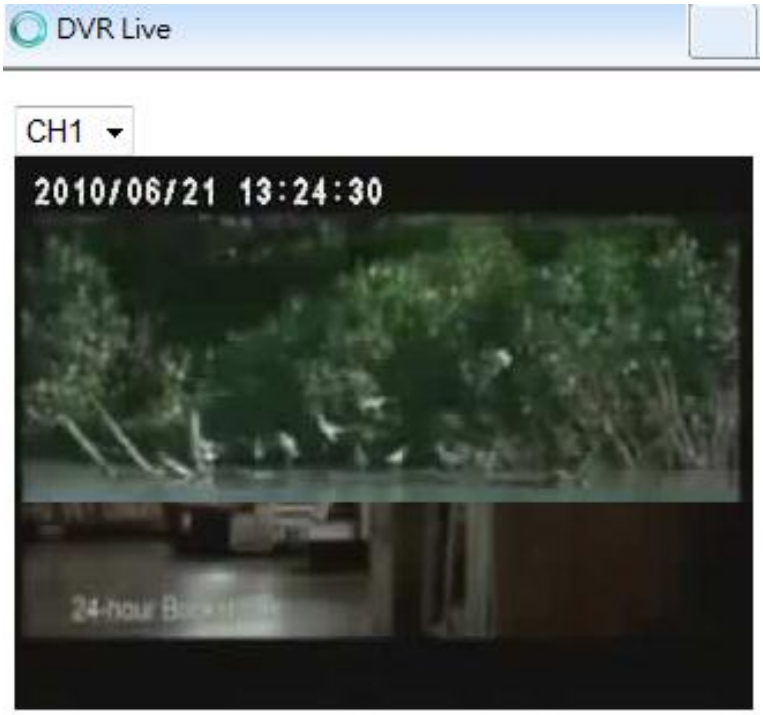


Step Two: Windows as below will show up. Please enter the user name and password. Default user name and password is **admin/123456**. Other related setup about user account and password, please check **"Account Setup**. " The user name and password appeared in this image is only for demonstration. Actual user name and password depend on the setup of on-site DVR.

Step Three: Click on "Jpeg Viewer"


DVR - Microsoft Internet Explorer
http://h264demo.i-dvr.net
Internet Explorer 6, 7, 8
Download DVR Remote Desktop (Windows XP, Windows Vista, Windows 7)
Download DVR Remote Desktop (Mac OS X 10.6 or above)
JPEG viewer
Download Record File Player (Windows XP, Windows Vista, Windows 7)

Step Four: DVR images appear.



PS : Only for viewer, without any operation function.

4-4 AP Software Operation

Open the file “DVRemoteDesktop.exe”; enter the information of DVR “IP address”, “Port” “Username” and “Password” and click “OK”. You should be able to login DVR successfully and start to use the software. The default username and password is 「admin/ 123456」

“DVRemoteDesktop.exe” AP software provides some extra functions for remote users. Please check below table for minimum system requirements for “DVRemoteDesktop.exe” operation.

Table 4-4.1 System Requirements for AP software

CPU	Intel Pentium 4 above
OS	Microsoft Windows 7、Windows Vista、Windows XP SP2 above
RAM	512M above
VGA Card	Needed to support DirectX9.0 (Above) Note 1
Others	DirectX 9.0 above

Note 1:
Known VGA card that support DirectX9.0 currently:
NVIDIA: Geforce FXseries, Geforce 6series, Geforce 7series, Geforce 8series, Geforce 9series, Geforce 200series, etc.
Or
visit:http://en.wikipedia.org/wiki/Comparison_of_Nvidia_graphics_processing_units
ATI: Radeon R300series, Radeon R400series, Radeon R500series, Radeon R600series, Radeon R700series, Radeon HD 3xxx IGPseries, Mobility Radeonseries (9500 above), Mobility Radeon Xseries, Mobility Radeon HDseries, or FireGL Vseries etc.
Or visit: http://en.wikipedia.org/wiki/Comparison_of_ATI_graphics_processing_units
SiS: SiS 67Xseries, or SiS 77Xseries etc.
Or visit: http://www.sis.com/support/support_compare.htm
Intel: 91Xseries, 94Xseries, 96Xseries, G3Xseries, or G4Xseries, etc.
Or visit: http://en.wikipedia.org/wiki/Intel_GMA

CHAPTER 5 SPECIFICAITONS

1. VIDEO		
Input Level		1.0 Vp-p±10% Composite, 75Ω Balanced
Display Speed	NTSC	HD 30FPS, D1 240fps
	PAL	HD 30FPS, D1 200fps
Display Resolution	NTSC	1280x720,704(H) X 480(V)
	PAL	1280x720,704(H) X 576(V)
Monitor Output		1VGA(1280x1024)+1BNC(704x480 / 704x576) for Co-monitor
2. RECORDING		
Compression Method		H.264
Recording Speed		NTSC Max.HD 30 fps → D1 45 fps / Max. D1 120 fps PAL Max.HD 30 fps → D1 37 fps / Max. D1 100 fps
Recording Resolution	NTSC	1280x720,704 X 480 , 704 X 240 , 352 X 240
	PAL	1280x720,704 X 576 , 704 X 288 , 352 X 288
Quality	Independent for each channel	Below Basic/ Basic/ Normal/ High/ Highest
Schedule		Setup by “minute” as unit
Mode		Manual / Event (Motion, Sensor) / Schedule
Method		By resolution, fps and quality Setup fps and quality separately for normal and event recording
3. SATA DEVICE		
Capacity	Internal Storage	Max: 3 Device
	External Storage	Max: 1 Device(E-SATA)
Type		SATA / SATAⅡ compatible
External Bay Interface		E-SATA
4. ALARM		
Motion Detection		Available per each camera/ Multi-detection level
5. CONNECTIONS		
Video Input		SDI camerax1+(704x480 / 704x576) analog canerax8
Video Output		BNC : 1 port (To switch the main output or SPOT output) VGA : 1 port (Max Resolution:1280X1024) HDMI : 1 port (Option)
Audio Input		RCA 8 port
Audio Output		RCA 2 port
USB 2.0		USB memory stick, USB Touch Monitor
USB 1.1		USB Mouse
Remote		Remote control
External I/O		1 RS-485, 9 Sensor, 2 Relay Output
Ethernet		1 RJ45 connector, 10/100 Mbps
6. ELECTRICAL		

Power Source		DC 12V / 5A (4CH/8CH), DV 12V / 6A (16CH)
7. ENVIRONMENTAL		
Operation Temperature		5℃ ~ + 40℃
Humidity		Less than 90%
8. PHYSICAL		
Dimension		430(W) x 293(D) x 55(H) mm
Weight		1.85kg (without HDD)
9. BACKUP		
BACKUP	USB Stick	Video Data, Audio
	Network	Video Data, Audio
10. SEARCHING & PLAYBACK		
Searching Type		Event/ Time
Playback speed		HD30 FPS,D1 240 FPS
11. MULTI-REMOTE SURVEILLANCE		
Monitoring Environment		Web / Client Software(CMS)
Max. client		Supporting multi-client (5 clients accessible)
12. OTHERS		
OS		Embedded Linux
Multi Task	Pentaplex	Live、Record、Playback、Network、Backup
Control Device		Front Keys / Remote Control / Virtual Keyboard / Mouse / AP Software
PC Viewer		Direct monitoring of DVR's HDD on PC
Numbers of event list		10000

CHAPTER 6 MOBILE APPLICATION INSTALLATION AND USAGE

You can remotely monitor all channels of DVR through your mobile device.
The required mobile application is from DVR manufacturer and it supports mobile OS for

1. Windows mobile 5.0 above.
2. Symbian.
3. Google Android
4. Blackberry
5. Apple Iphone

6-1 Mobile Application Installation and Operation for Symbian

Please refer to shipping the Mobile->Symbian directory CD

6-2 Mobile Application Installation and Operation for Windows Mobile

Please refer to shipping the Mobile->WindowsMobile directory CD

6-3 Google Android Phone OS application and operation

Please refer to shipping the Mobile->Gphone directory CD

6-4 Blackberry Operation System Software Installation and Operation

Please refer to shipping the Mobile->Blackberry directory CD

6-5 iPhone Software installation and operation

Please refer to shipping the Mobile->Iphone directory CD

CHAPTER 7 CMS INSTALLATION AND USAGE GUIDE

9-1 CMS Installation

System Requirement:

∗Intel Pentium 4 processor or equivalent.

∗Microsoft Windows Vista、Windows XP、Windows 2003 Server.

∗Besides OS and other required APs, there will be 512MB remaining memory needed or above.

∗512MB memory above.(500M requested for group DVR connection and 180M for single DVR)

∗20MB HD space. Recording and image capturing require extra space for storage.

∗VGA Card needs to support DirectX9 and function well while running it. Please refer to p48 Note 1.

Installation:

Please refer to shipping the CMS directory CD

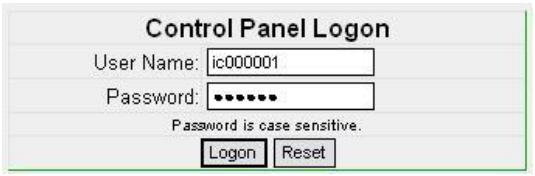
APPENDIX Ⅰ I-DVR.NET REGISTRATION

DDNS Registration on I-DVR.NET

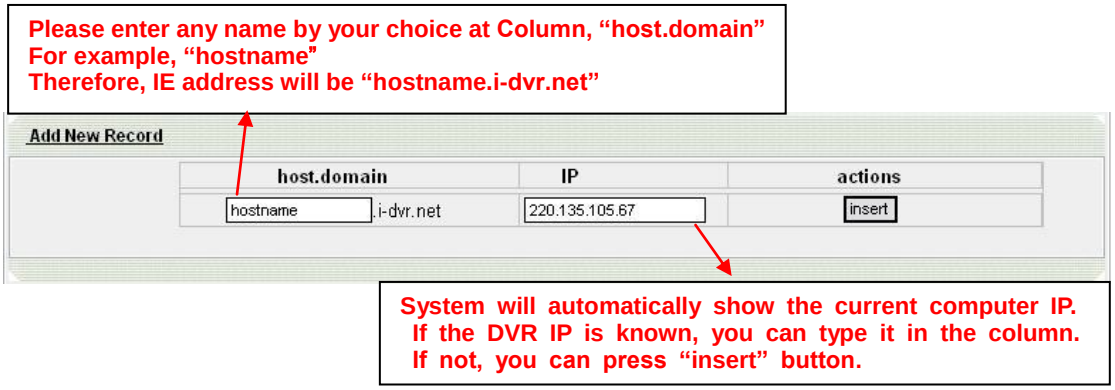
In the package of each DVR, you will find a sticker shows account information including username and password that allows users to login I-DVR.NET for registration.

To register DDNS on I-DVR.NET, please follow the steps as shown.

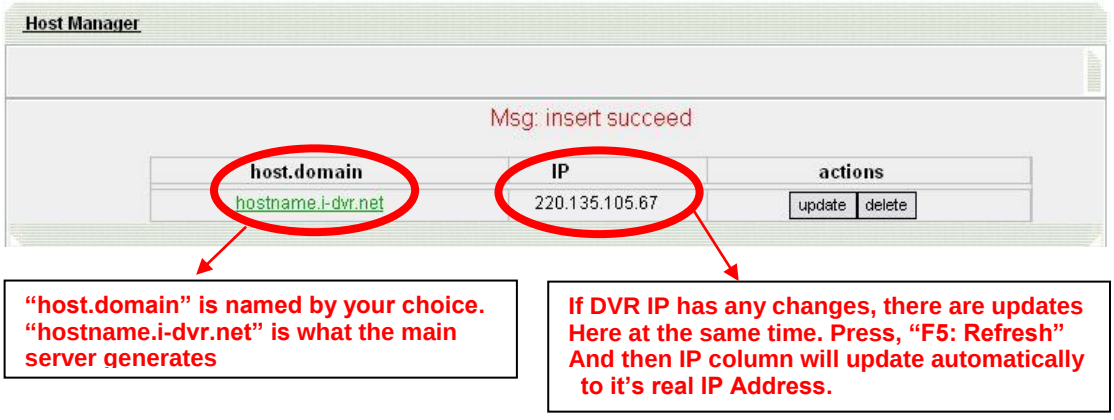
Step 1. Please open IE browser and then enter " http://i-DVR.NET/logon.asp " in IE browser bar. Next, "Control Panel Logo" dialog will appear. Enter the username and password provided by the sticker and then press, "Logon."



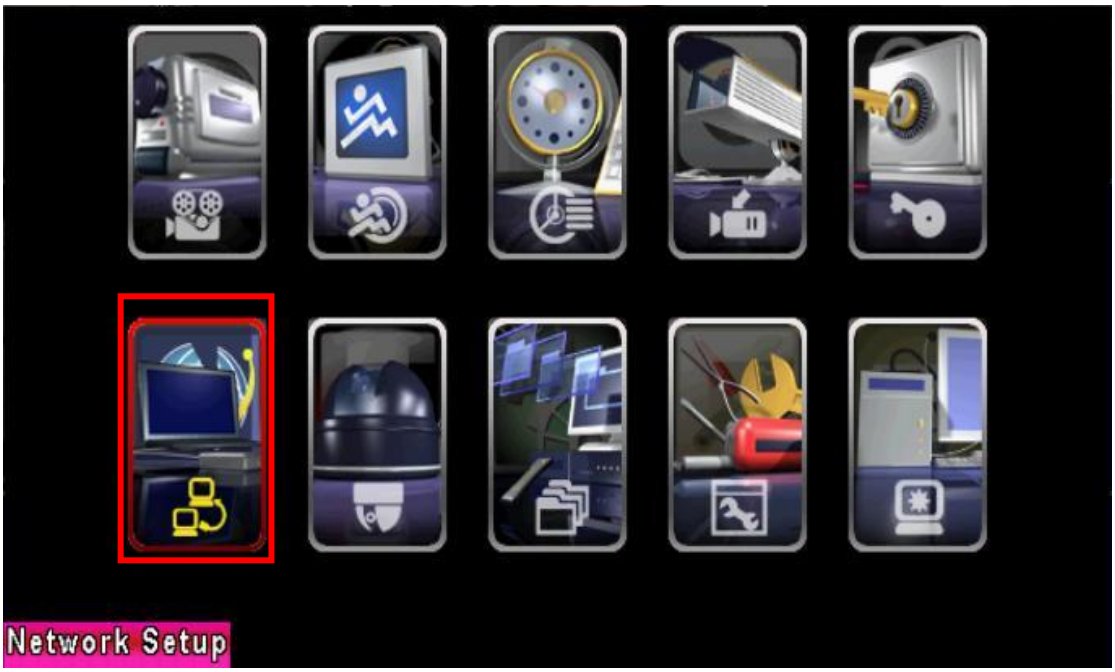
Step 2. After login successfully, enter name at "host" in "Add New Record" dialog. For example, "hostname" is the host name, and then the address will be "hostname.i-dvr.net." Select "Standard" type and enter an IP address of the DVR. Input known IP address if any, or press the "Add New" button if none.

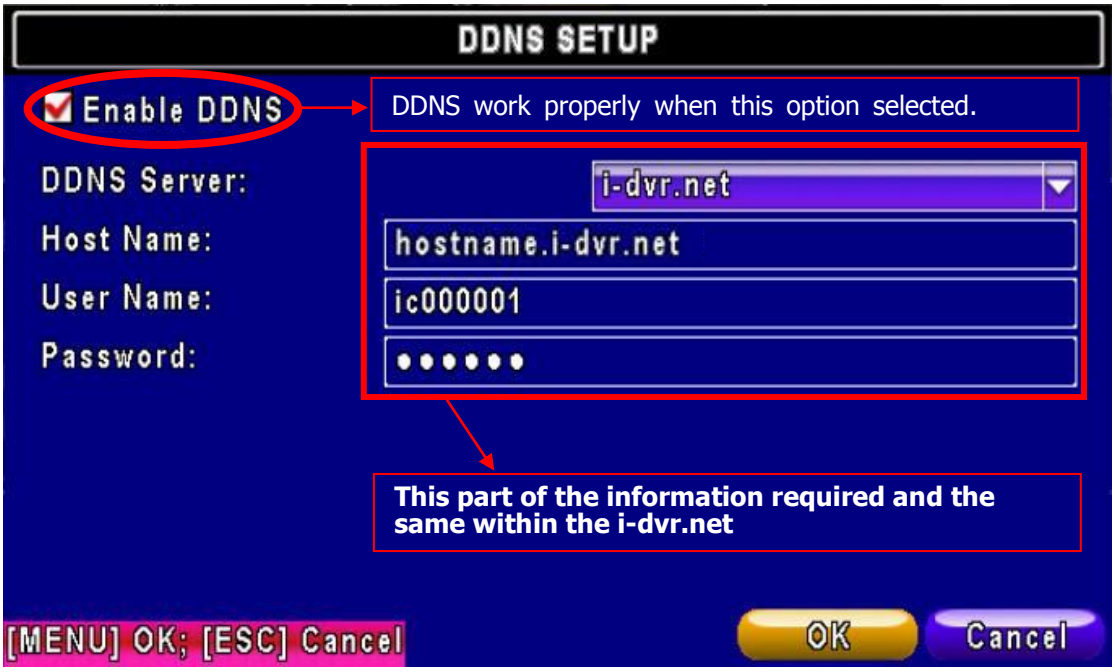

Please enter any name by your choice at Column, "host.domain"
For example, "hostname"
Therefore, IE address will be "hostname.i-dvr.net"
Add New Record
host.domain
IP
actions
hostname
.i-dvr.net
220.135.105.67
insert
System will automatically show the current computer IP.
If the DVR IP is known, you can type it in the column.
If not, you can press "insert" button.

Step 3. The "Host Manager" dialog will show "insert succeed" when user setup successfully. The "**host.domain**" column will show up the setup just entered.
Next, enter the DVR the same time setting the DDNS client machine information
If DDNS set up at DVR side successfully, the website will update the IP information in one minute. The IP column will be renewed to the corresponding IP address by pressing "F5: refresh" button.

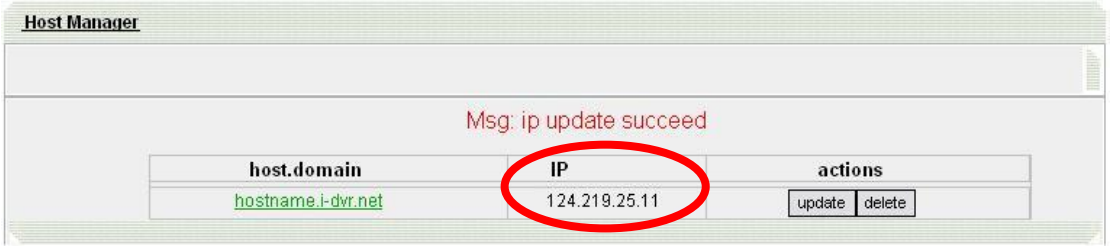


Step 4. Enter DVR →Main Menu → Network Setup → DDNS. Activate DDNS functions and input related information.





Step 5. Back to the i-dvr.net, on this page by pressing "F5: Refresh", IP will be automatically updated into the DVR of the real IP location.

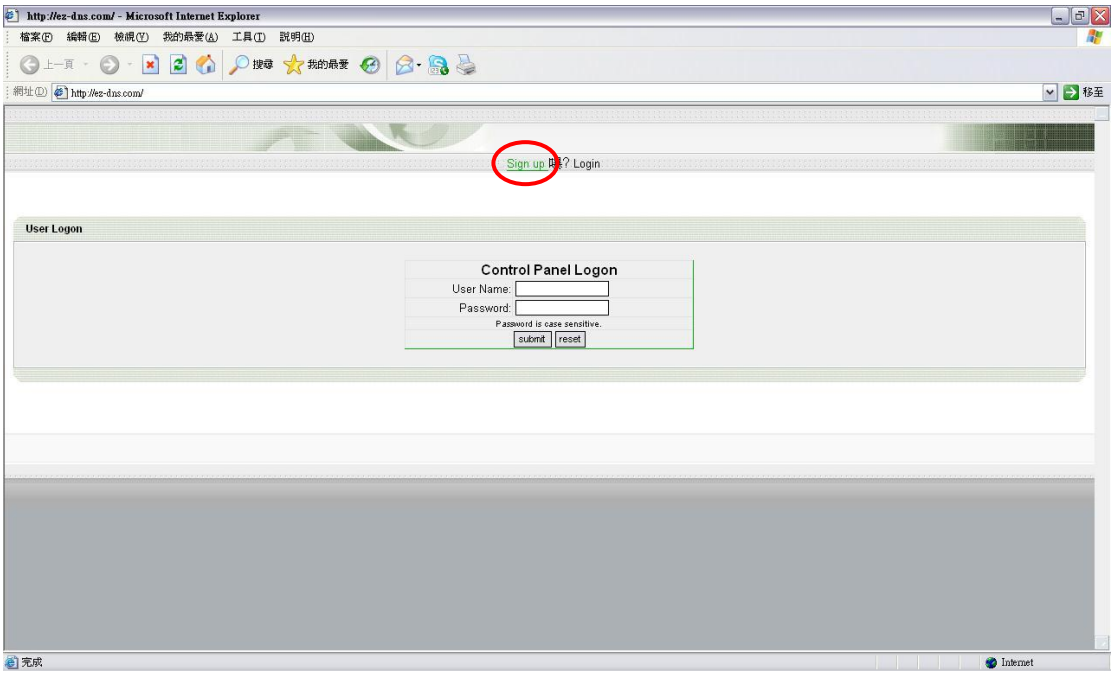


APPENDIX Ⅱ ez-dns REGISTRATION

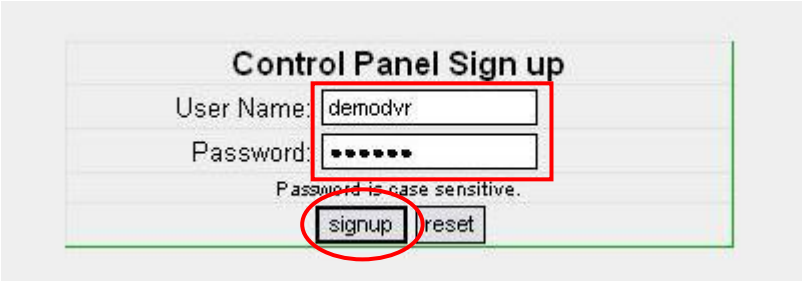
DDNS Registration on ez-dns.com

In addition to I-DVR.NET the Company, the other has a ez-dns.com server may be used..
To register DDNS on ez-dns.com, please follow the steps as shown.

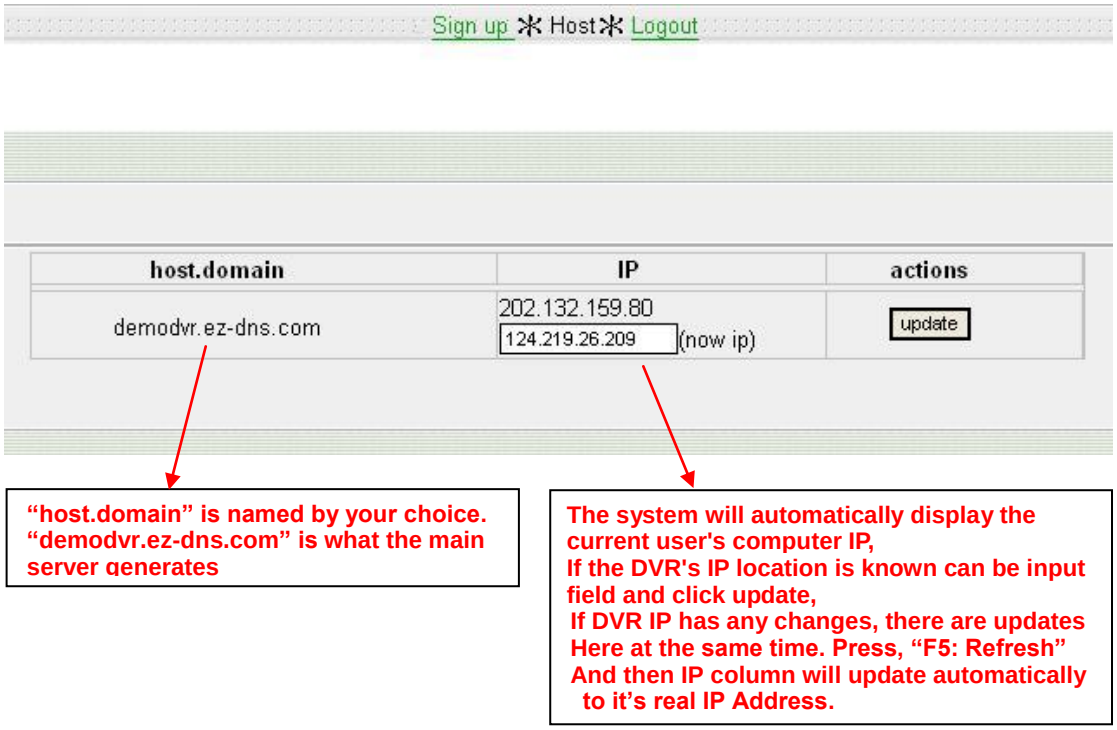
Step 1. Please open IE browser and then enter " http://ez-dns.com " in IE browser bar.
First time, please click on the top of the screen of "Sing up" (red box)



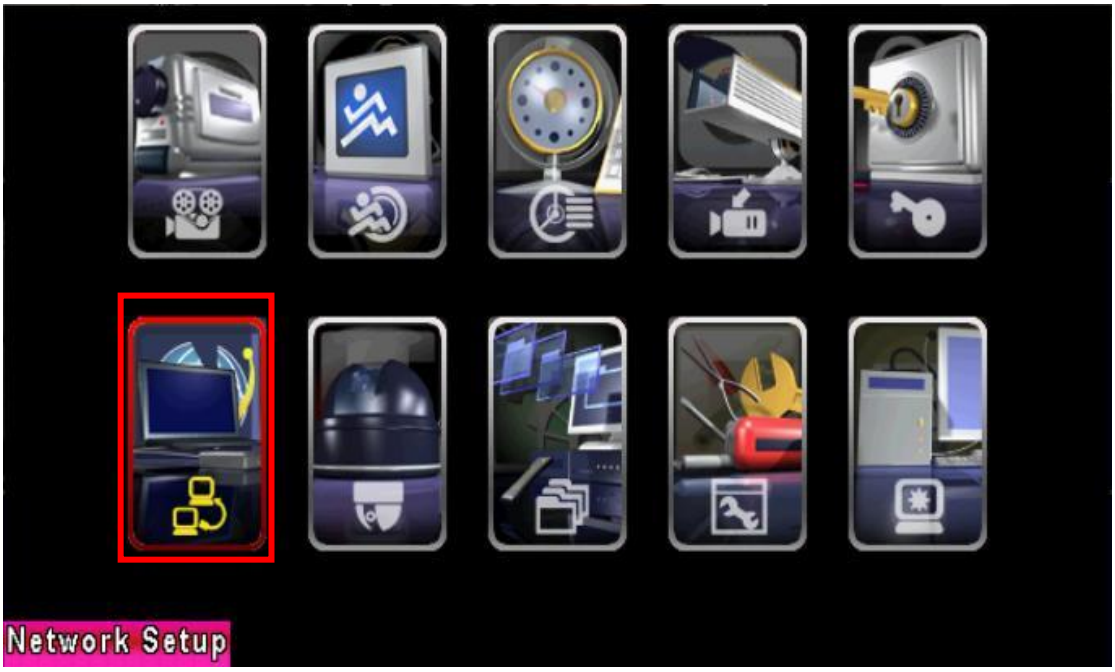
Step 2. To input a user name and password, after clicking "singup".
Later, log in to use ez-dns.com that this group account password

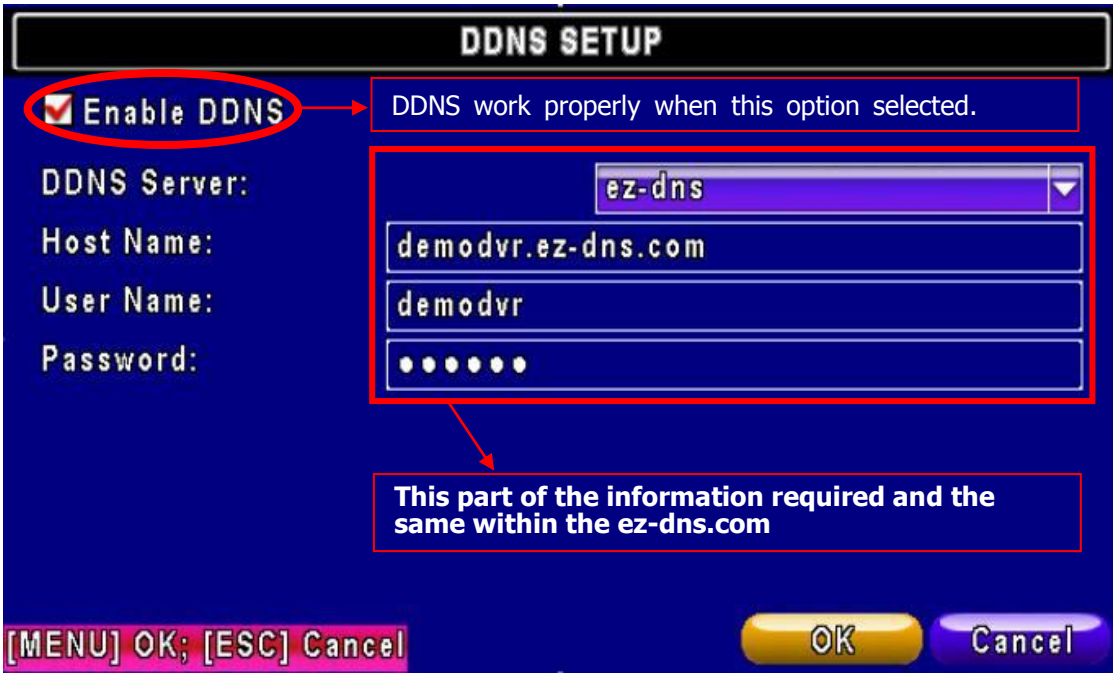


Step 3. The "**host.domain**" column will show up the setup just entered.
Next, enter the DVR the same time setting the DDNS client machine information
If DDNS set up at DVR side successfully, the website will update the IP information in 10 minute. The IP column will be renewed to the corresponding IP address by pressing "F5: refresh" button.

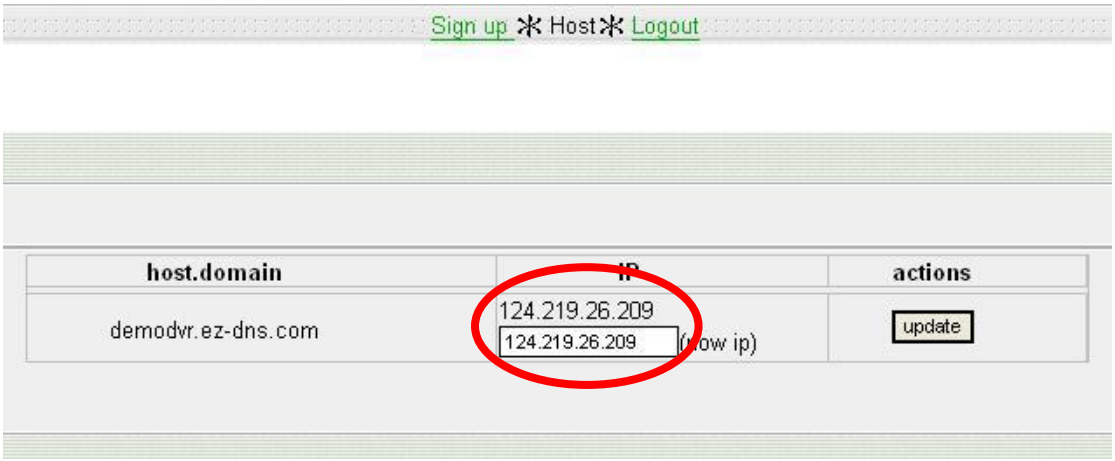

Sign up
Host
Logout
host.domain
IP
actions
demodvr.ez-dns.com
202.132.159.80
124.219.26.209
(now ip)
update
"host.domain" is named by your choice. "demodvr.ez-dns.com" is what the main server generates
The system will automatically display the current user's computer IP,
If the DVR's IP location is known can be input field and click update,
If DVR IP has any changes, there are updates Here at the same time. Press, "F5: Refresh"
And then IP column will update automatically to it's real IP Address.

Step 4. Enter DVR →Main Menu → Network Setup → DDNS. Activate DDNS functions and input related information.





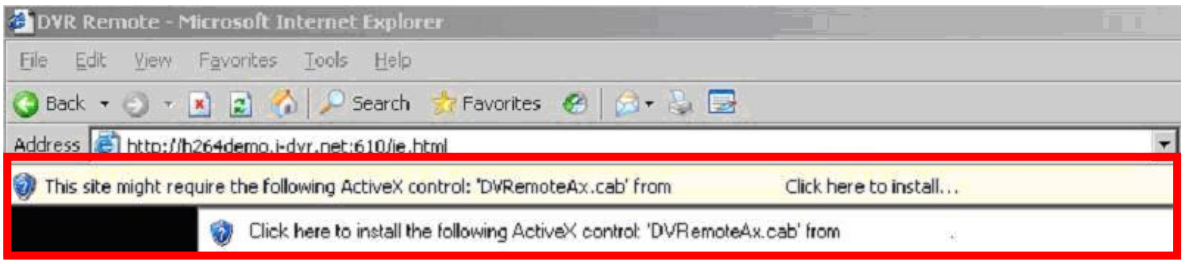
Step 5. Back to the ez-dns.com, on this page by pressing "F5: Refresh", IP will be automatically updated into the DVR of the real IP location.



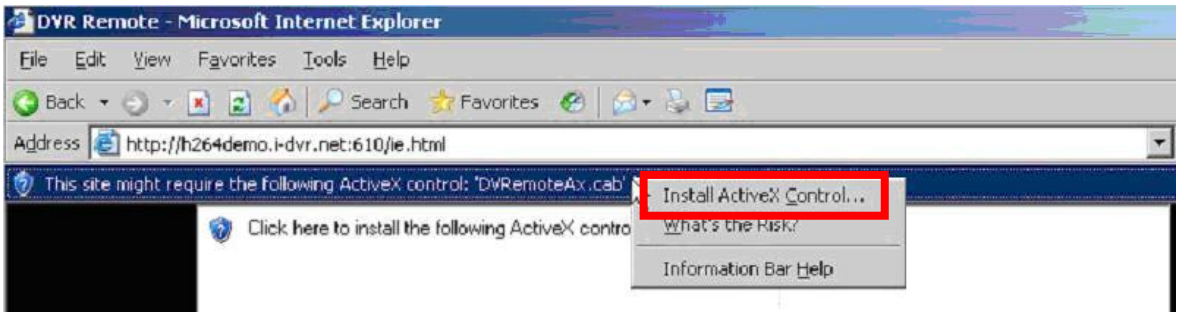
APPENDIXⅢ Remote Monitoring IE ActiveX Control Installation Instruction

When using IE for remote monitoring for the first time, IE ActiveX Control is needed to be downloaded.

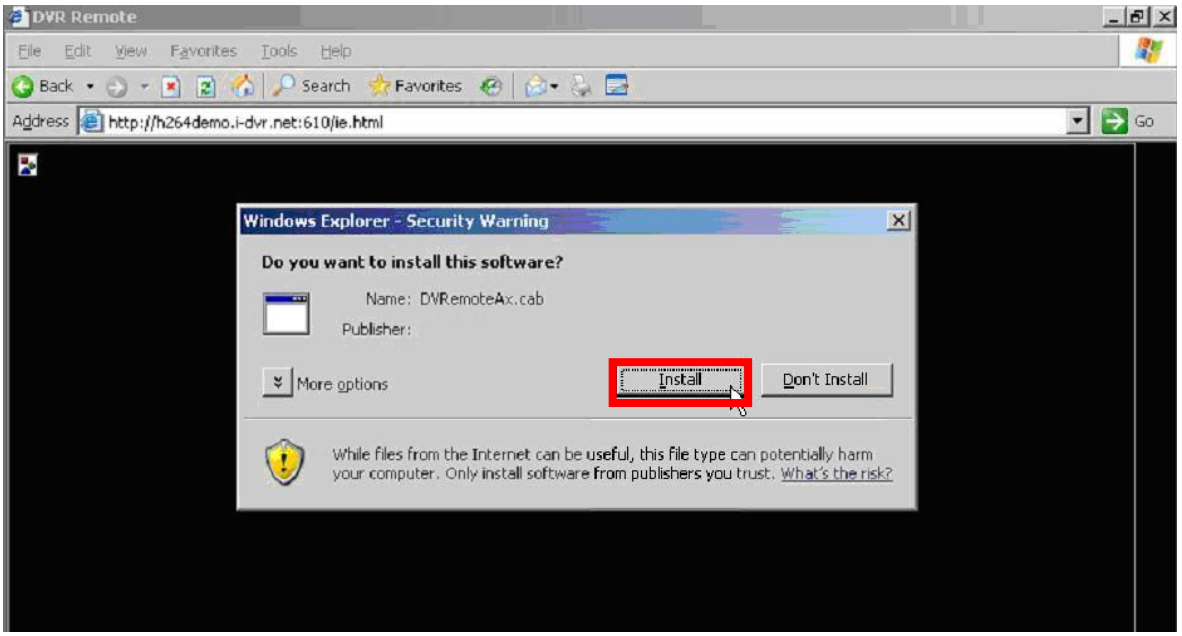
1. When remote monitoring on IE for the first time, an alert message occurs “Install ActiveX control” on the tool bar.


DVR Remote - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://h264demo.i-dvr.net:610/ie.html
This site might require the following ActiveX control: 'DVRemoteAx.cab' from Click here to install...
Click here to install the following ActiveX control: 'DVRemoteAx.cab' from

2. Click at this alert message and select “Install ActiveX Control”

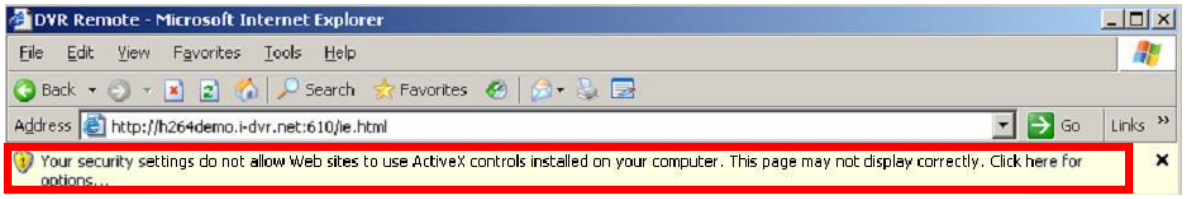

DVR Remote - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://h264demo.i-dvr.net:610/ie.html
This site might require the following ActiveX control: 'DVRemoteAx.cab'
Click here to install the following ActiveX contro
Install ActiveX Control...
What's the Risk?
Information Bar Help

3. “Do you want to install this software” alert pops up. Select “Install”

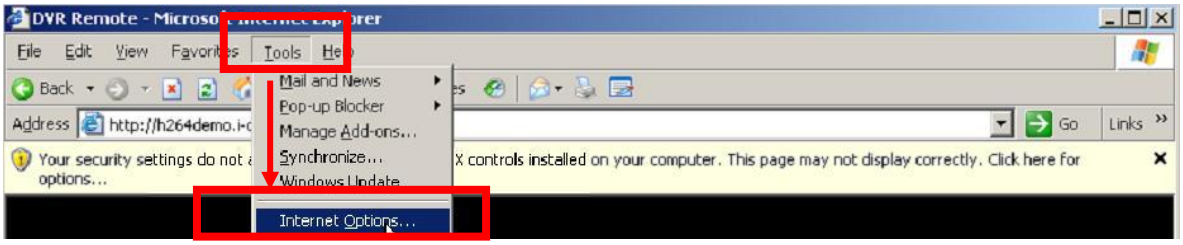

DVR Remote
File Edit View Favorites Tools Help
Back Search Favorites
Address http://h264demo.i-dvr.net:610/ie.html
Go
Windows Explorer - Security Warning
Do you want to install this software?
Name: DVRemoteAx.cab
Publisher:
More options
Install
Don't Install
While files from the Internet can be useful, this file type can potentially harm your computer. Only install software from publishers you trust. What's the risk?

4. After installation, IE remote monitoring image appears.

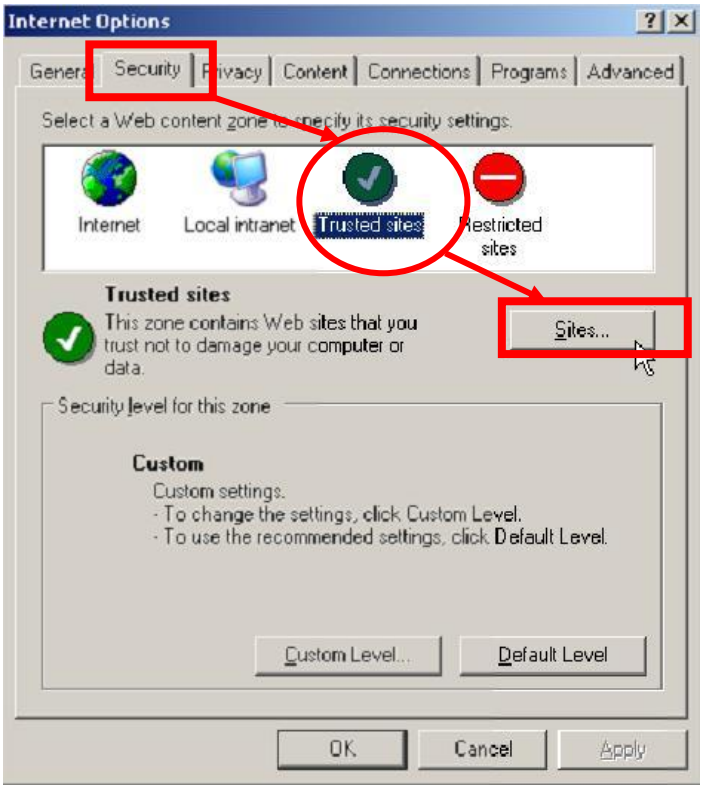
5. If message, “Your security Settings do not allow web sites to use ActiveX controls installed on your computer.” pops on when logging in, please follow the next instruction.


DVR Remote - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://h264demo.i-dvr.net:610/ie.html
Go Links
Your security settings do not allow Web sites to use ActiveX controls installed on your computer. This page may not display correctly. Click here for options...

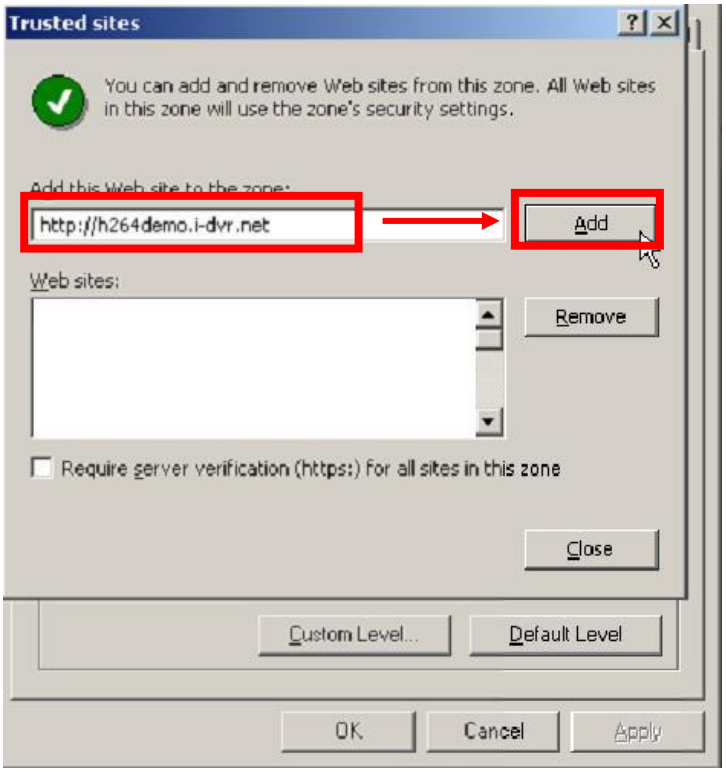
6. First select “Tools” on the tool bar and then select “Internet Options”



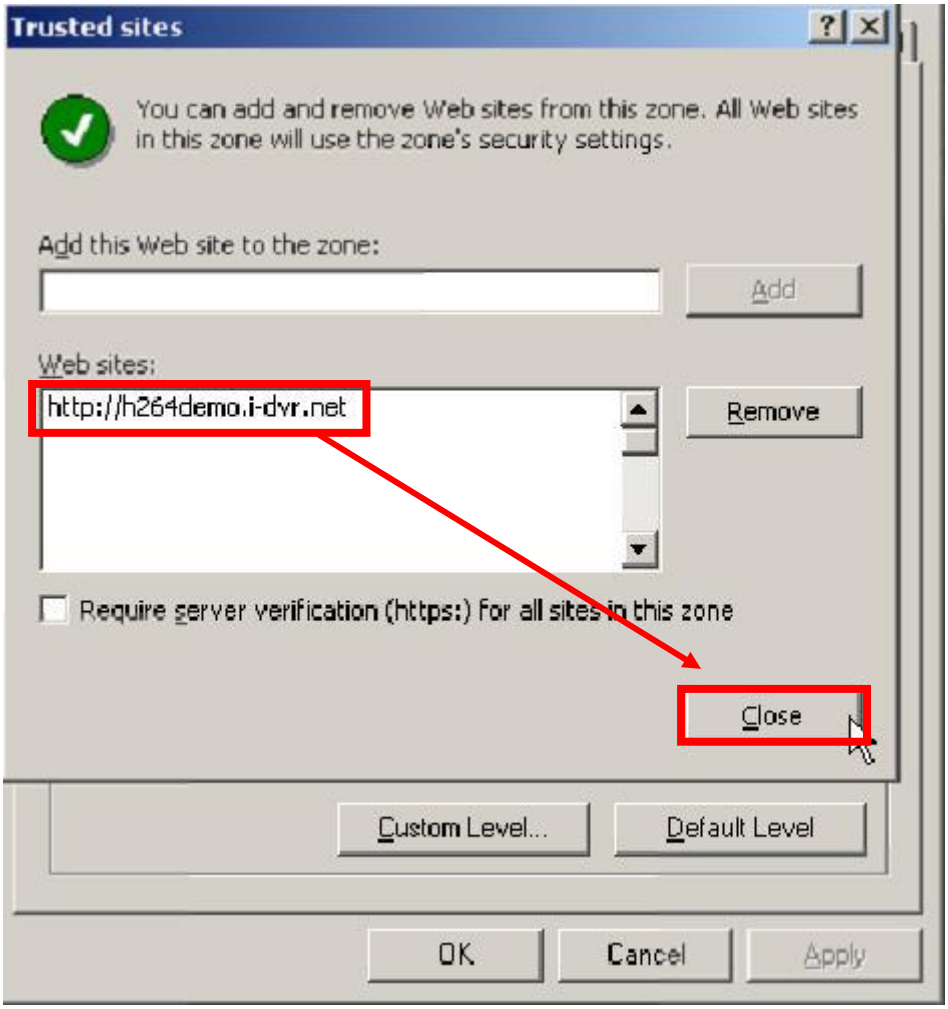
7. Select Security →Trusted Sites → Sites



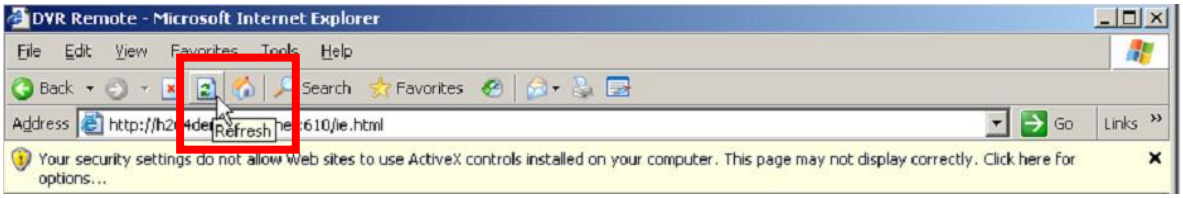
8. Enter DVR address (This address is only for demonstration. Please use the address depends on the setup of on-site DVR.) into the blanks shown in picture, and then press “add.”



9. Newly added website will appear at the trusted web sites list. Press close.



10. Go back to IE window, press refresh button or F5.


DVR Remote - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Refresh
Address
Go
Links
Your security settings do not allow Web sites to use ActiveX controls installed on your computer. This page may not display correctly. Click here for options...